

cancelled without prejudice, claims 5, 12 and 13 have been written in independent form, and new claim 14 has been added. It is respectfully submitted that claims 2-5 and 8-14 are patentable over Hulbert and Agrawal for at least the following reasons.

Hulbert is directed to a mobile radio power control device where transmission power is increased when an error is detected in the transmitted signal which is retransmitted back, and the power is decreased when no error is detected by a smaller amount to maintain a constant bit error rate. As correctly noted by the Examiner, Hulbert does not teach or suggest that "the first power level is selected to be the lowest level to correspond to a maximum allowable probability of failed first information units transmission". According to the Examiner, it would have been obvious to one skilled in the art to select a first power level to be the lowest level.

It is respectfully submitted that the present invention as recited in independent claim 5 requires more than selecting first power level to be the lowest level. In particular, claim 5 requires that "the first power level is selected to be the lowest level to correspond to a maximum allowable probability of failed first information units transmission and consequent second information units transmission." These features are nowhere taught or suggested in Hulbert, nor would they have been obvious to one

skilled in the art at the time the present invention was made.

It is respectfully submitted that the prior art must be examined in light of the teachings of the prior art. The prior art may not be examined utilizing the teachings of the present patent application.

Accordingly, when Hulbert is reviewed without utilizing the teachings of the present application, Hulbert does not disclose or suggest that "the first power level is selected to be the lowest level to correspond to a maximum allowable probability of failed first information units transmission and consequent second information units transmission", as recited in independent claim 5. Accordingly, it is respectfully submitted that independent claim 5 be allowed. In addition, as claims 2-4 depend from independent claim 5, applicant respectfully requests that claims 2-4 also be allowed over Hulbert.

In rejecting claim 12-13, the Examiner correctly noted that Hulbert does not teach or suggest that the first power level is selected to control the average power consumption of the transmitter in order to maintain a minimum average power consumption taking into account the first power level and the second power level for the consequent probability of transmission of second information units.

Agrawal is cited in an attempt to remedy this deficiency in Hulbert. FIG 1 and column 5, lines 16-35 of Agrawal are cited

which show a mobile radio system where an appropriate power is chosen for a subsequent transmission so that a single information bit for a given quality of service is minimized, where the quality of service is defined in terms of carrier-to-interference ratio, channel throughput, reliability, and BER. According to the Examiner, this teaching of Agrawal remedies the deficiencies in Hulbert.

It is respectfully submitted that Agrawal does not teach or suggest that the first power level is selected to control the average power consumption of the transmitter in order to maintain a minimum average power consumption taking into account the first power level and the second power level for the consequent probability of transmission of second information units, as recited in independent claims 12-14. Column 5, lines 16-35 of Agrawal is directed to the power of subsequent transmission, not the first power level.

Further, quality of service is minimized in Agrawal which are related to service or the quality of communication as defined as carrier-to-interference ratio, channel throughput, reliability, and BER. In stark contrast, the power level is selected to control the average power consumption of the transmitter in order to maintain a minimum average power consumption , which is determined using first and second power levels.

Unlike, the present invention as recited in claims 12-14, there is no teaching or suggestion in Agrawal of selecting the first power level, let alone selecting the first power level to control the average power consumption of the transmitter in order to maintain a minimum average power consumption taking into account the first power level and the second power level for the consequent probability of transmission of second information units.

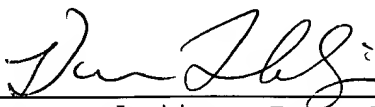
Accordingly, it is respectfully submitted that independent claims 12-14 be allowed. In addition, as claims 8-11 depend from independent claims 12-13, applicant respectfully requests that claims 8-11 also be allowed over Hulbert and Agrawal.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any informalities remain, the Examiner is requested to telephone the undersigned in order to expedite allowance.

Please charge any fee deficiencies and credit any overpayments
to Deposit Account No. 14-1270.

Respectfully submitted,

By 
Dicran Halajian, Reg. 39,703
Attorney
(914) 333-9607
December 14, 2001

Enclosure: Substitute Abstract
Marked Up Abstract (Appendix A)
Marked Up Amended Claims (Appendix B)

CERTIFICATE OF MAILING

It is hereby certified that this correspondence
is being deposited with the United States Postal Service
as first-class mail in an envelope addressed to:

COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

On December 14, 2001
(Date of Mailing)

By 
(Signature)

Appendix A

Version with Markings to Show Changes Made to the Abstract

A method and apparatus for transferring information over a communications link includes transmitting information at a first power level, monitoring for correct reception of the transmitted information and transmitting further information at a second-, greater power level than that used for the original transmission if correct reception did not occur. The further information allows the content of the originally transmitted information to be established and in one embodiment constitutes a retransmission of the originally transmitted information. By retransmitting at a greater power level the probability of correct reception is enhanced, especially when the communications link is wireless. A transmitter employing the present invention may offer reduced power consumption since the transmission power level used for the original transmission may be lower than that used by a transmitter not benefiting from the present invention.

Figure 4

Appendix B

Version with Markings to Show Changes Made to the Claims

The following are marked up versions of amended claims 2-5 and 8-13:

1 2. (Once Amended) The method of Claim ~~1~~5 wherein the content of
2 the second information units is the same as the content of the first
3 information units.

1 3. (Once Amended) The method of Claim ~~1~~5 wherein the units are
2 data frames or packets of data.

1 4. (Once Amended) The method of Claim ~~1~~5 wherein monitoring is
2 performed by the transmitting station based on information provided
3 by the receiving station.

1 5. (Once Amended) ~~The~~ A method of Claim 1 of transferring
2 traffic information in units over a wireless digital communications
3 link between a transmitting station and a receiving station
4 comprising the steps of:
5 transmitting first information units at a first power level;

6 monitoring if correct reception of the transmitted units
7 occurred; and

8 transmitting second information units associated with the first
9 information units, for which first information units the monitoring
10 did not indicate correct reception occurred, at a second power level
11 which is greater than the first power level, the second information
12 units allowing the content of the first information units to be
13 established;

14 wherein the first power level is selected to be the lowest
15 level to correspond to a maximum allowable probability of failed
16 first information units transmission and consequent second
17 information units transmission.

1 8. (Once Amended) The communication system of Claim 612 wherein
2 the content of the second information units is the same as the
3 content of the first information units.

1 9. (Once Amended) The transmitter station of Claim 713 wherein
2 the content of the second information units is the same as the
3 content of the first information units.

1 10. (Once Amended) The communication system of Claim 612
2 wherein the system is a cellular mobile radio telephone system.

1 11. (Once Amended) The transmitter station of Claim 713 wherein
2 the transmitter station is employed as a component of a cellular
3 mobile radio telephone system.

1 12. (Once Amended) ~~The~~ A digital wireless communications system
2 ~~of Claim 6~~ comprising:

3 at least one transmitter having means for transmitting first
4 information units at a first power level;

5 at least one receiver having means for receiving the
6 transmitted information units;

7 control means for controlling the transmitter output power; and
8 monitoring means for monitoring if correct reception of the
9 transmitted units occurred at the receiver,

10 wherein the transmitting means transmits second information
11 units associated with the first information units for which first
12 information units the monitoring means does not indicate correct
13 reception has occurred, the second information units being
14 transmitted at a second power level that is greater than the first
15 power level, the second power level being selected by the control
16 means, and wherein the second information units allow the content of
17 the first information units to be established, and

18 wherein the control means selects the first power level to
19 control the average power consumption of the transmitter in order to
20 maintain a minimum average power consumption taking into account the
21 first power level and the second power level for the consequent
22 probability of transmission of second information units.

1 13. (Once Amended) ~~The A~~ transmitter station of Claim 7 for digital
2 wireless transmission of traffic information to a receiver, said
3 transmitter station comprising:
4 a transmitter for transmitting first information units at a
5 first power level;
6 control means for controlling the transmitter output power; and
7 monitoring means for monitoring if correct reception of the
8 transmitted units occurred at the receiver,
9 wherein the transmitter transmits second information units
10 associated with the first information units for which first
11 information units the monitoring means does not indicate correct
12 reception has occurred, the second information units being
13 transmitted at a second power level that is greater than the first
14 power level, the second power level being selected by the control
15 means, and wherein the second information units allow the content of
16 the first information units to be established, and

17 wherein the control means selects the first power level to
18 control the average power consumption of the transmitter in order to
19 maintain a minimum average power consumption taking into account the
20 first power level and the second power level for the consequent
21 probability of transmission of second information units.